Pervasive Collaborative Computing Environment (PCCE)

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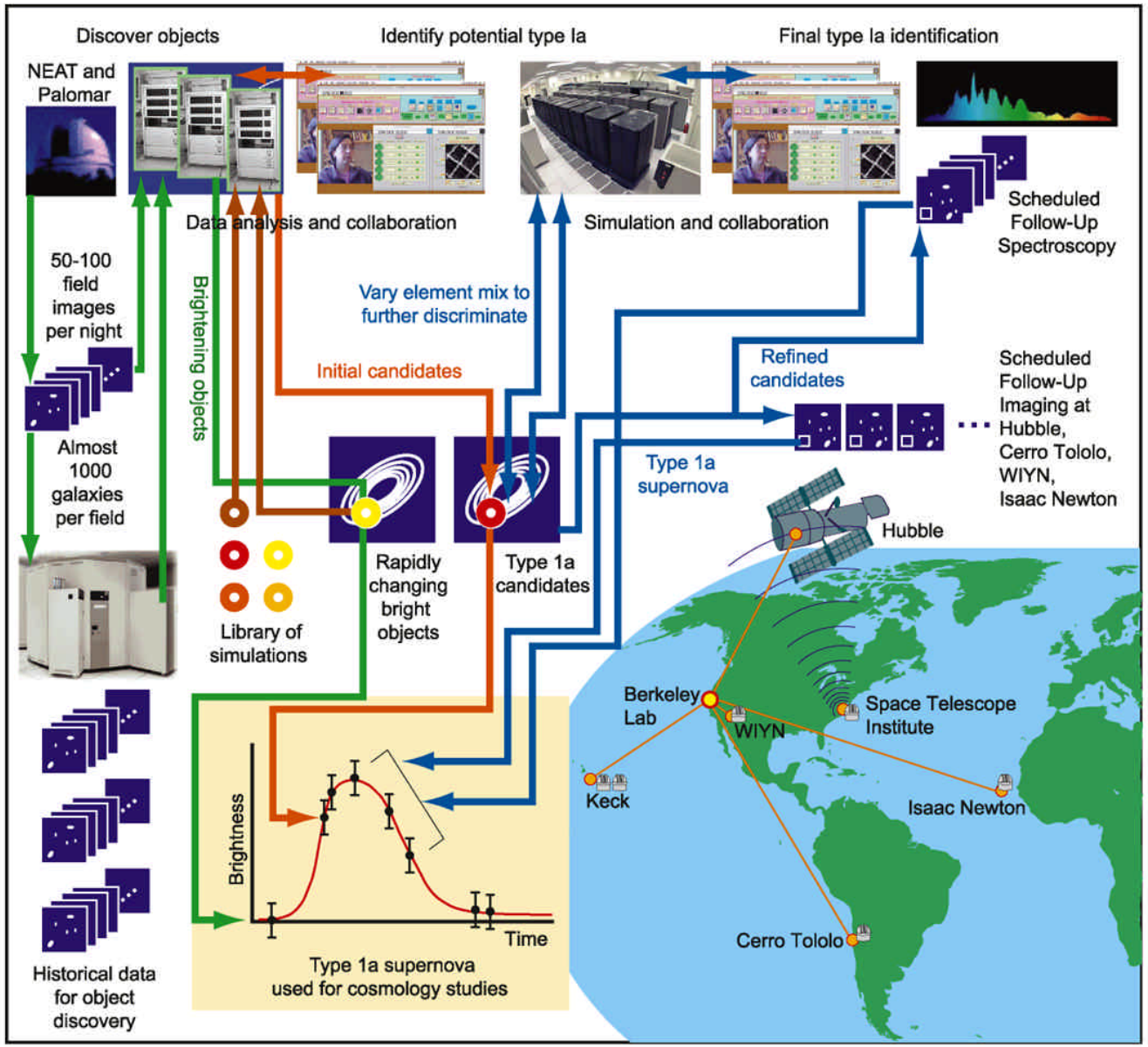
PCCE Goals

- Focus on providing collaboration tools that enable connectivity and collaboration on a 'continuous' basis
- Target compute intensive collaborations
- Leverage off of the Grid computing environment (e.g. security and directory services)
- Develop workflow tools that will enable coordination of Grid computing processes and human tasks in a workflow framework
- Support the continuum of collaborative interaction (synchronous and asynchronous)
- Web-based interface for ease of use/installation

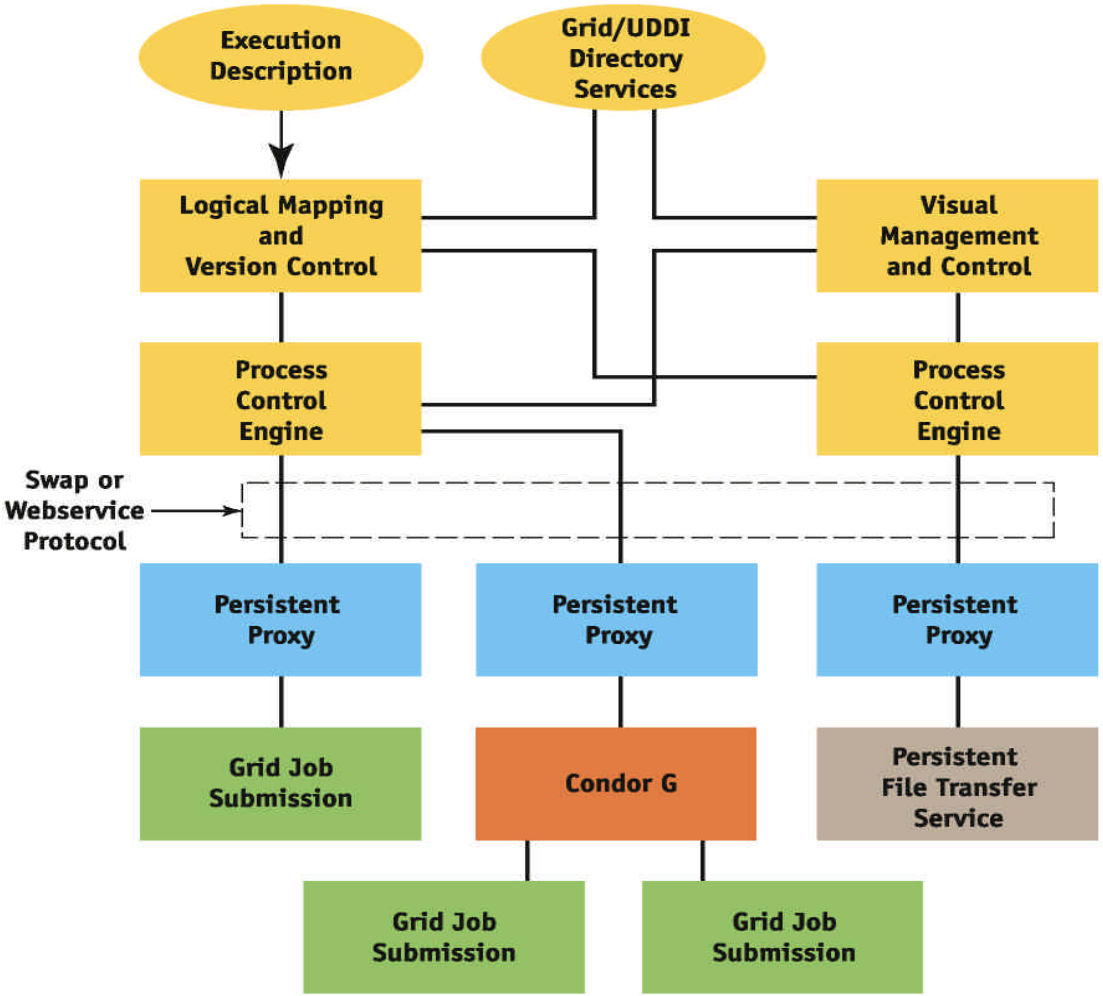
Supernova Factory Collaboration



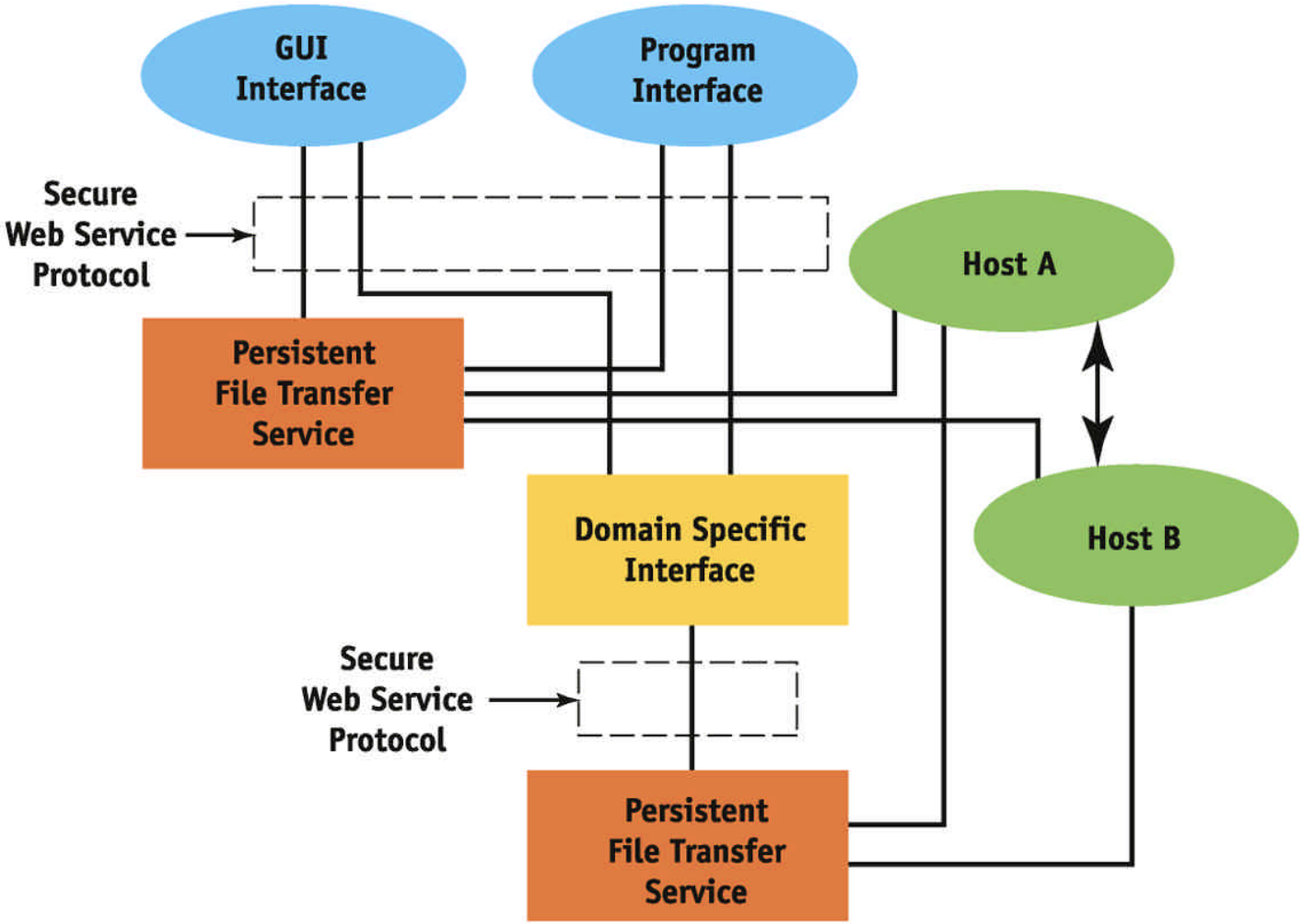
Initial Target Activities

- Submission and tracking of computational workflow
- Reliable movement of data files
- Human interaction with the computational workflow
- Human-to-human interactions
- File-sharing

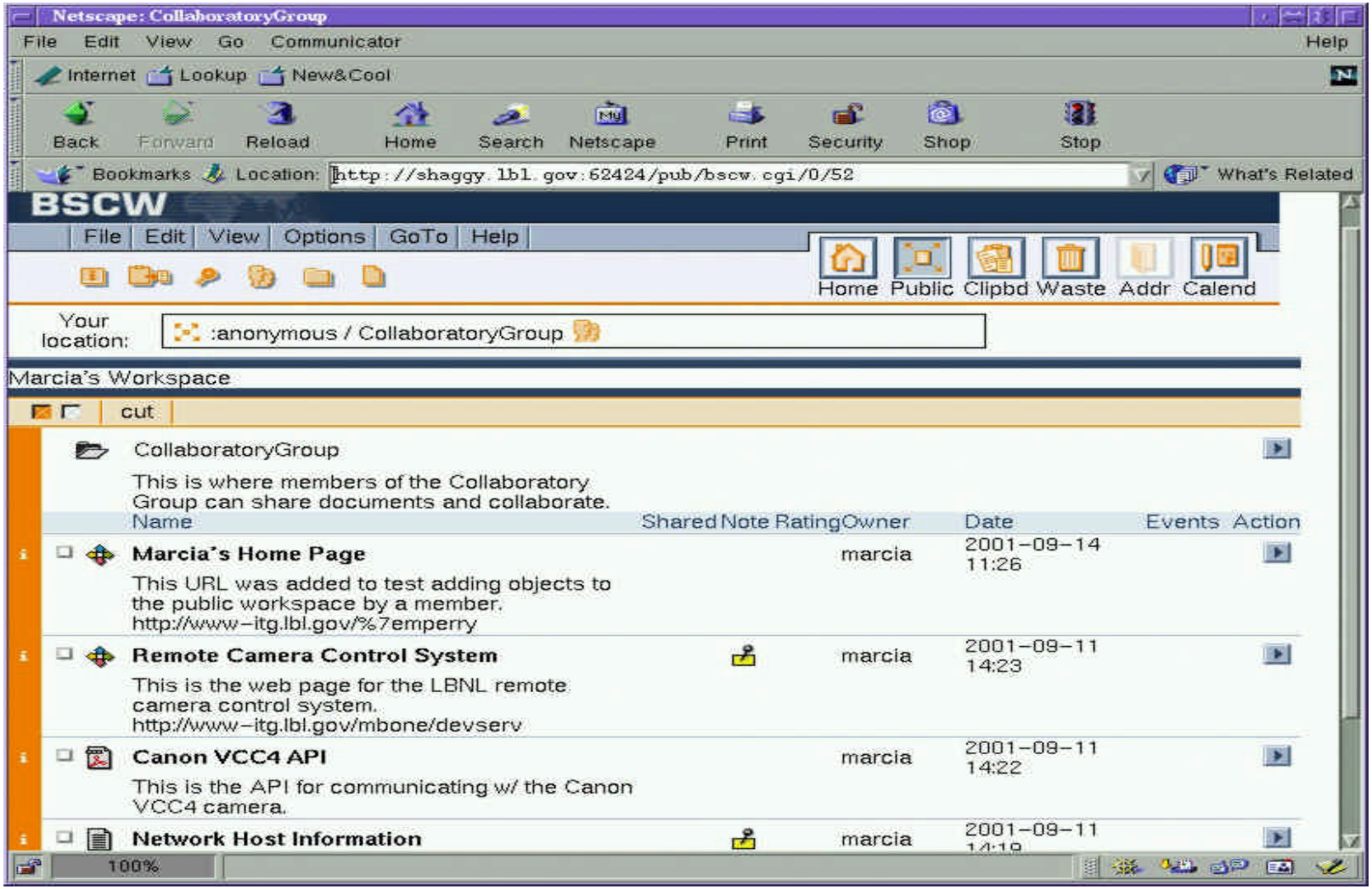
PCCE Workflow



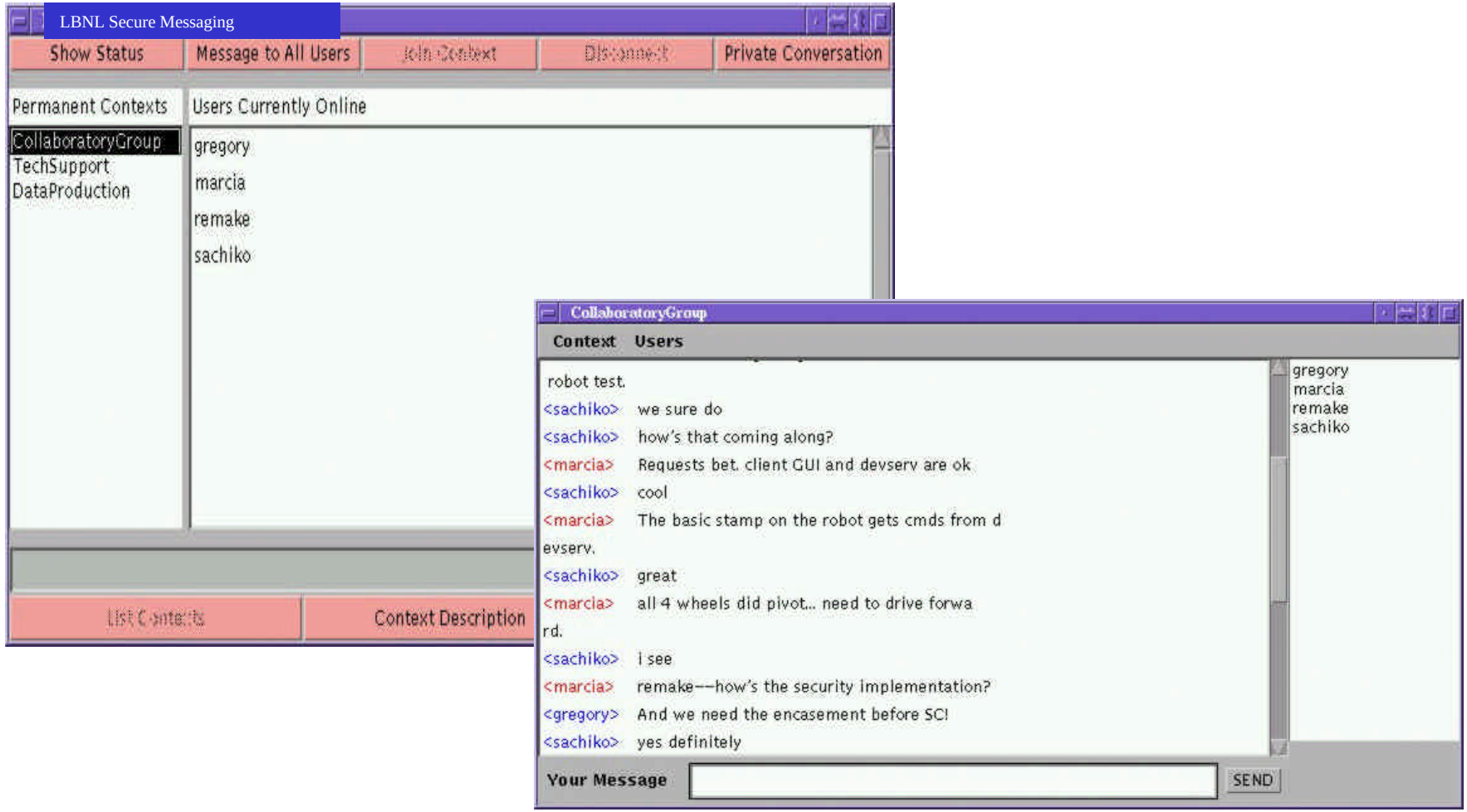
Reliable/Persistent File Transfer Services



PCCE File Sharing



PCCE Messaging



Project Milestones

- Year 1
  - Evaluate existing collaboration tools
  - Prototype integration of Grid services (file transfer service)
  - Install Condor-G and API to Condor scheduler
  - Prototype workflow model for Supernova Factory
- Year 2
  - Reliable and recoverable event reporting in Condor's DAGman
  - Integrate Grid services
  - Integrate WebDAV-based services and SOAP interfaces for workflow